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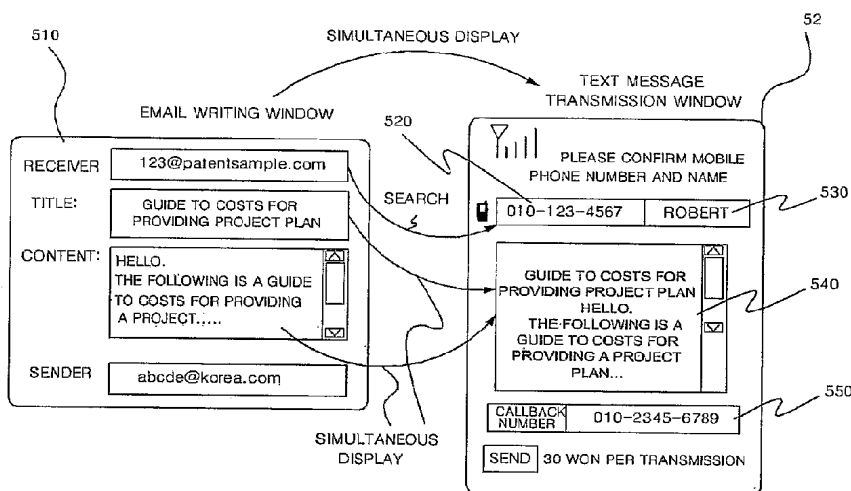
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(54) Title: METHOD FOR PROVIDING NOTIFICATION SERVICE OF ELECTRONIC MAIL TRANSMITTING



(57) Abstract: Provided is a method for providing an electronic document transmission notification service for notifying transmission of the electronic mail That a sender creates and transmits to a receiver. The method is achieved by storing an email address of the receiver with a mobile phone number and a name on a database, simultaneously displaying an email writing window and a text message transmission window on a screen when the sender accesses a mail site and selects writing an e.mail (a first display step), when a receiver's email address is selected from the e.mail writing window, searching for a mobile phone number corresponding to a selected e.mail address and displaying the searched mobile phone number on a receiver's mobile phone number section (a second display step), when the sender writes a title and a content of an e.mail on the email writing window, displaying at least the title of the email in a content section of the text message transmission window (a third display step), and transmitting a message on the text message transmission window in form of a short message according to confirmation of the sender.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

METHOD FOR PROVIDING NOTIFICATION SERVICE OF ELECTRONIC MAIL TRANSMITTING

Technical Field

5 The present invention related to a method of providing an electronic document transmission notification service, and more particularly, to a method of providing an electronic document transmission notification service by which transmission of an electronic document is notified to a mobile terminal using a short message service (hereinafter, referred to as "SMS").

Background Art

10 Recently, use of an electronic document such as an electronic mail or e-mail is gradually increased. Transmission of an electronic document is difficult to be recognized real time for a user who is not always connected to a network such as the
15 Internet. To solve the problem, the SMS has been used as a method to notify receipt of the electronic document. However, since a huge number of spam mails are received, if the SMS is received for all mails, the user is heavily inconvenienced thereby.

20 Also, whenever a mail server tries to filter such spam mails, since the spam mails pass through a fire wall by frequently changing IDs, it is a big problem to use the SMS as a mail arrival notification on a receiver's burden.

 To solve the problem, recently, mail portal service providers have suggested a method of sending the SMS on a sender's burden when there is an urgent need to notify transmission of an electronic document.

25 FIG. 1 illustrates an example of a conventional method of notifying transmission of an electronic document by sending an SMS. Referring to FIG. 1, according to the conventional notification method, after an email is transmitted, a message input window 110 and a mobile terminal input window 120 are displayed so that a sender needs to input again a content about the transmission of an email. Since such method is
30 inconvenient for users, the number of users using the service has not noticeably

increased. Further, according to the conventional method, there frequently occurs a case of sending an email to an incorrect email address due to an incorrect selection of an email address.

5 Disclosure of Invention

To solve the above and/or other problems, the present invention provides a method for providing an electronic document transmission notification service, by which a content of a transmitted email is quickly notified to an email receiver by clicking only one time without separately inputting a content on a text message transmission window,
10 in storing a mobile phone number and a name are stored in a database with an email address of the receiver and transmitting a text message notifying that an email has been transmitted after writing and transmitting the email.

According to an aspect of the present invention, a method for providing an electronic document transmission notification service for notifying transmission of the
15 electronic mail that a sender creates and transmits to a receiver, comprises storing an email address of the receiver with a mobile phone number and a name on a database, simultaneously displaying an email writing window and a text message transmission window on a screen when the sender accesses a mail site and selects writing an email (a first display step), when a receiver's email address is selected from the email writing
20 window, searching for a mobile phone number corresponding to a selected email address and displaying the searched mobile phone number on a receiver's mobile phone number section (a second display step), when the sender writes a title and a content of an email on the email writing window, displaying at least the title of the email in a content section of the text message transmission window (a third display step), and
25 transmitting a message on the text message transmission window in form of a short message according to confirmation of the sender.

Brief Description of the Drawings

FIG. 1 illustrates an example of a conventional method of notifying transmission
30 of an electronic document by sending an SMS;

FIG. 2 illustrates a configuration of a system for providing an electronic document transmission notification service according to an embodiment of the present invention;

FIG. 3 illustrates an example of an information content in form of an address book which is stored in a database of FIG. 2;

FIG. 4 is a flow chart for explaining a method of providing an electronic document transmission notification service according to an embodiment of the present invention; and

FIG. 5 is a reference view showing the method of FIG. 4 in detail.

Best Mode for Carrying Out the Invention

FIG. 2 illustrates a configuration of a system for providing an electronic document transmission notification service according to an embodiment of the present invention. FIG. 3 illustrates an example of an information content in form of an address book which is stored in a database of FIG. 2.

Referring to FIGS. 2 and 3, a system according to an embodiment of the present invention includes a mail server 210, a database (DB) 211, an SMS providing portion 220, a sender's terminal 230 for sending an electronic document, and a receiver's mobile terminal 240.

The mail server 210 runs a mail service site (hereinafter, referred to as "mail site") to provide a notification service according to the present invention and can be interconnected with the SMS providing portion through a network.

The mail server 210 provides a mailing service so that a sender accesses the mail site to send an email and supports through the below-described steps that the content of the email sent in a text message based on a short message. That is, the mail server 210 controls that, when a user selects a receiver's email address from an email writing window, a receiver's mobile phone number corresponding to the selected email address is searched and displayed on the text message transmission window at the same time and, when the user inputs the title and content of the email on the email writing window, the title and content, in particular, at least the title is simultaneously

displayed.

The DB 211, as shown in FIG. 3, stores an email address 302, a mobile phone number 304, and a name 306 which are registered when the sender joined the mail site as a member, in form of an address book, and the contents of emails transmitted by the sender.

The SMS providing portion 220 transmits the short message created the mail server 210 to the receiver's mobile terminal 240. The short message can be provided by a mobile communication company of the receiver's mobile terminal 240.

The sender's terminal 230 can be interconnected with the mail server 210 and generally is a personal computer or a wireless terminal, for example, a notebook computer or a personal digital assistant (PDA), which can be interconnected with the mail server 210 through a network such as a wireless Internet.

The receiver's mobile terminal 240 is a terminal capable of receiving a short message from the SMS providing portion 220 and generally is a cellular phone, but not excluding a wireless terminal such as a PDA in a broad meaning of capable of receiving a short message.

A method for providing an electronic document transmission notification service according to the present invention using the system of FIG. 2 will be described below.

FIG. 4 is a flow chart for explaining a method for providing an electronic document transmission notification service according to an embodiment of the present invention. FIG. 5 is a reference view showing the method of FIG. 4 in detail. The method for providing an electronic document transmission notification service according to an embodiment of the present invention explained in FIG. 4 shows a control process of notifying a content of transmission of an email created using the sender's terminal 230 to the receiver's mobile terminal 240.

In the method for providing an electronic document transmission notification service according to an embodiment of the present invention, a user, that is, a sender, accesses the mail site and stores an email address, a mobile phone number, and a name registered when the sender joined the mail site as a member, on the DB 211 (S402). The DB 211 contains information including the email address 302, the mobile

phone number 304, and the name 306 of persons who the user frequently communicates with, in form of an address book.

The mail server 210 displays an email writing window 510 and a text message transmission window 52 on the same screen when the sender accesses the mail site and selects writing an email (S404).

Next, when the user selects an email address of a receiver from the email writing window 510, the mail server 210 searches the DB 211 for the mobile phone number 304 corresponding to the selected email address 302 and displays the searched mobile phone number 304 in a receiver's mobile phone number section 520 of the text message transmission window 52 (S406).

A receiver's name section 530 for displaying the name of a receiver corresponding to the searched mobile phone number is provided next to the receiver's mobile phone number section 520. since the name of a receiver is simultaneously displayed with the mobile phone number of the receiver, an error of transmitting an email to a wrong receiver can be prevented. Also, a mobile phone number of a sender which is registered at joining the mail site is displayed in a callback number section 550.

When the user writes a title and content of an email on the email writing window 510, the title and content are displayed on a content section 540 of the text message transmission window 52 (S408). The order of the steps S406 and S408 can be switched.

Then, when the user clicks the text message transmission window 52, it is assumed that an addition or correction to the displayed content exists, the text message can be added or corrected (S412).

When the sender desires to transmit a corresponding message (S414), the mail server 210 provides the message to the SMS providing portion 220 (S416) so that the message can be transmitted to the receiver.

According to the present invention, the receiver who receives an email can also notified of transmission of the email by a text message in form of a short message.

According to the present invention, the mail server 210 controls that information of the user and information of persons who the user frequently communicates with,

which are provided by a subscriber of the mail site, are stored on the DB 211, the email writing window and the text message transmission window are simultaneously displayed on the same screen when a menu for transmitting an email is selected, the mobile phone number corresponding to the email address is automatically displayed in the mobile phone number section of the text message transmission window when the email address to send the email is selected, and the title and content are automatically displayed in the content section of the text message transmission window.

Since the content of the text message transmission window created as above is transmitted by only clicking a "SEND" icon, the user can conveniently send a notification that the email has been sent, with only the content of the email that is transmitted. Also, according to the present invention, the receiver's name section corresponding to the mobile phone number is provided next to the receiver's mobile phone number section in which the searched receiver's mobile phone number is displayed. Thus, since the name of the receiver is simultaneously displayed with the receiver's mobile phone number, an error of transmitting an email to a wrong receiver can be prevented.

In the above description, although the SMS notifying the transmission of an email is described, a case of notifying transmission of other electronic document is not excluded.

The above-described method can be embodied in a program and stored on a computer-readable recording medium such as a CD-ROM, a RAM, a ROM, a floppy diskette, a hard disk, or an optical magnetic disk.

While this invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention as defined by the appended claims.

Industrial Applicability

As described above, according to the present invention, a summary of transmission of an electronic document such as an email is automatically created and

transmitted to a receiver so that the transmission of an electronic document can be effectively notified to a receiver. Also, since the name of a receiver is simultaneously displayed with the mobile phone number of the receiver, an error of transmitting an email to a wrong receiver can be prevented.

What is claimed is:

1. A method for providing an electronic document transmission notification service for notifying transmission of the electronic mail that a sender creates and transmits to a receiver, the method comprising:

storing an email address of the receiver with a mobile phone number and a name on a database;

simultaneously displaying an email writing window and a text message transmission window on a screen when the sender accesses a mail site and selects writing an email (a first display step);

when a receiver's email address is selected from the email writing window, searching for a mobile phone number corresponding to a selected email address and displaying the searched mobile phone number on a receiver's mobile phone number section (a second display step);

when the sender writes a title and a content of an email on the email writing window, displaying at least the title of the email in a content section of the text message transmission window (a third display step); and

transmitting a message on the text message transmission window in form of a short message according to confirmation of the sender.

2. The method of claim 1, further comprising allowing adding/correcting of the content of the email when the sender clicks the text message transmission window.

3. The method of claim 1, further comprising providing a receiver's name section corresponding to the receiver's mobile phone number next to a the receiver's mobile phone number section in which the receiver's mobile phone number searched in the second display step is displayed, so that the name of the receiver displayed in the receiver's mobile phone number section is searched and displayed.

4. The method of either claim 1 or claim 2, wherein, in the transmitting of a message on the text message transmission window, a corresponding message is transmitted to an SMS providing portion of a mobile communication company to be transmitted to a mobile terminal of the receiver.

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FIG. 1


110

PLEASE INSERT MESSAGE HERE

0 / 80 BYTES

120

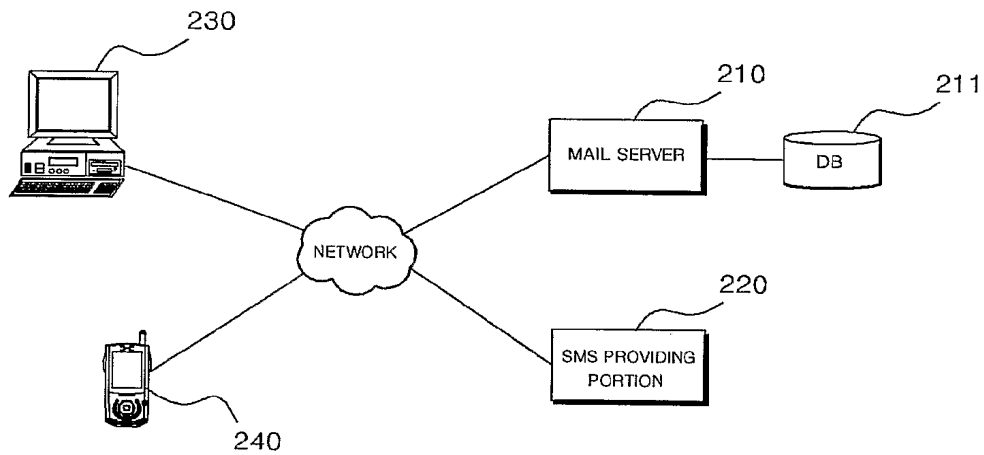
PLEASE INSERT MOBILE PHONE NUMBER

 MOBILE ADDRESS BOOK

(PLEASE INSERT NUMBERS WITHOUT "-")

SEND 30 WON PER TRANSMISSION

FIG. 2



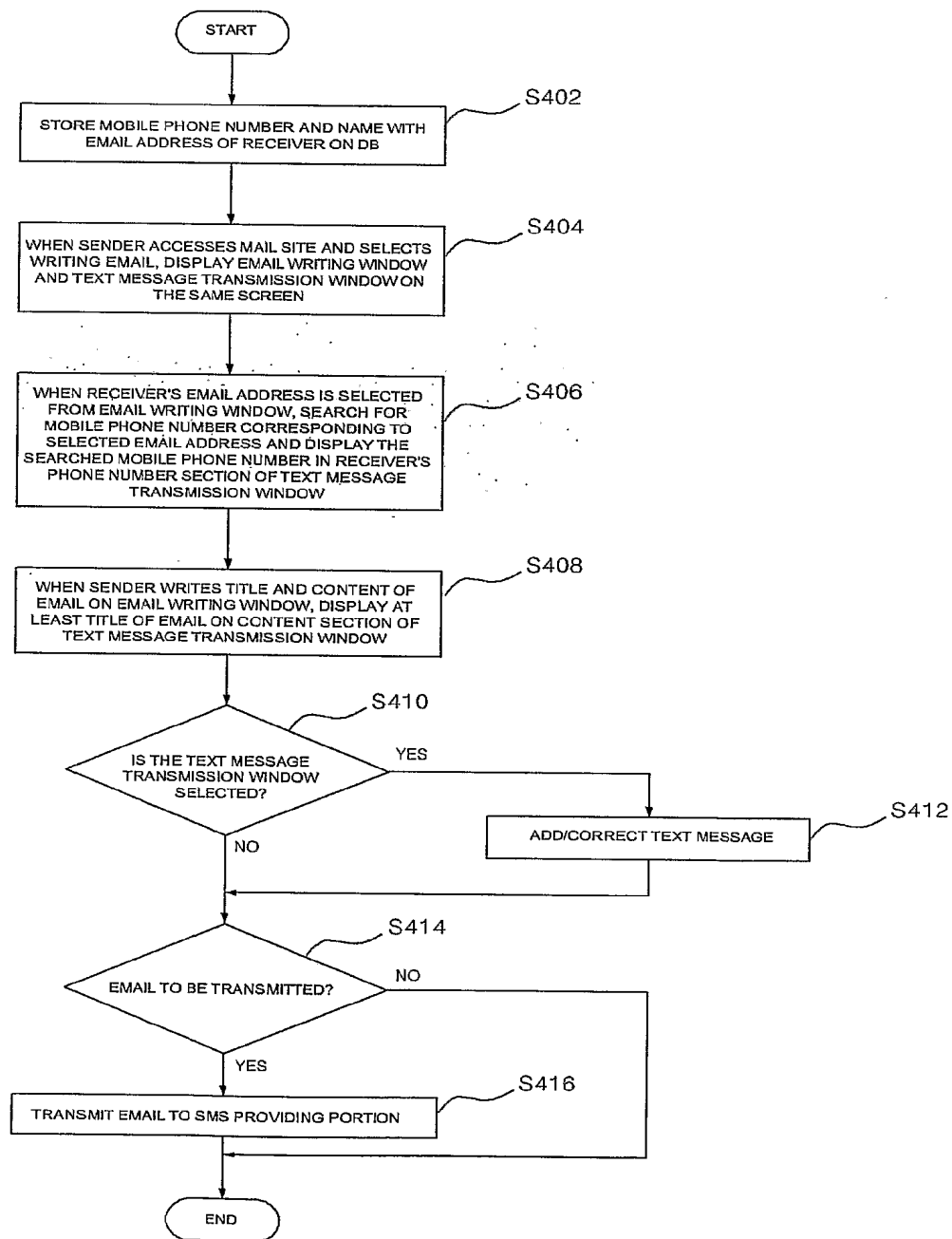
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FIG. 3

EMAIL ADDRESS	MOBILE PHONE NUMBER	NAME
123@patentsample.com	010-123-4567	ROBERT
test@psample.com	010-321-0000	JOHNSON
me@patentdrw.com	010-456-7777	DAVID
⋮	⋮	⋮

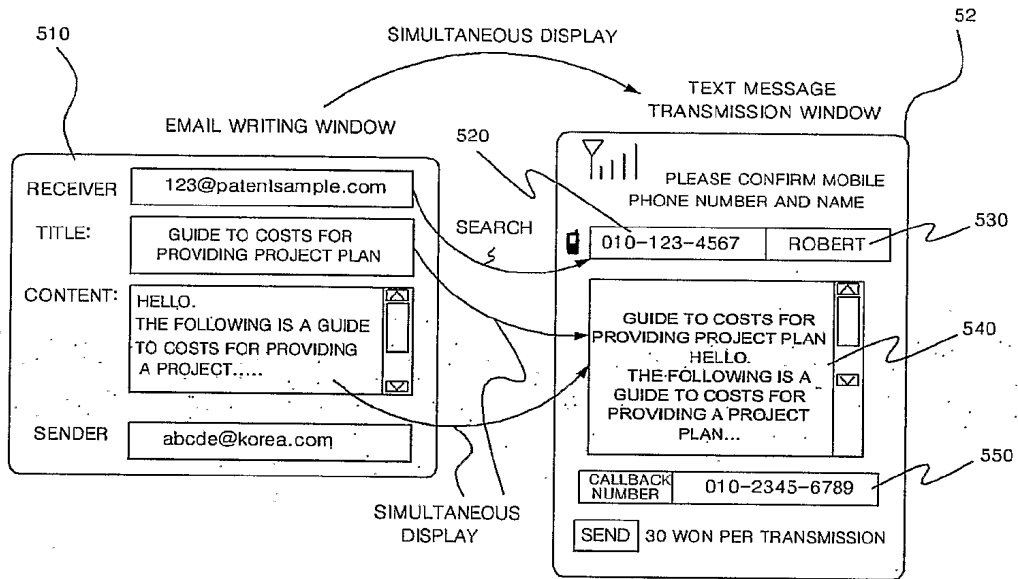
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FIG. 4



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FIG. 5



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2004/003219

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 H04Q 7/20**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 H04Q 7/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR2002-0060385 A (SK COMMUNICATIONS CORP.) 18.JUL.2002 see the whole document.	1-4
Y	KR2002-0079674 A (AGENTLEADER INC.) 19.OCT.2002 see the whole document.	1-4
A	US20010005675 A1 (NOKIA MOBILE PHONES LTD.) 28.JUN.2001 see the whole document.	1-4



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 MARCH 2005 (18.03.2005)

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR2002-0060385 A	18.07.2002	NONE	
KR2002-0079674 A	19.10.2002	NONE	
US20010005675 A1	28.06.2001	AU200123795A1	09.07.2001
		AU200123795A5	09.07.2001
		CN1413421	23.04.2003
		CN1413421A	23.04.2003
		EP01240787A1	18.09.2002
		EP1240787A1	18.09.2002
		EP1240787A1	18.09.2002
		FI992783A	24.06.2001
		FI112151B1	31.10.2003
		JP2003518885T2	10.06.2003
		JP15518885	10.06.2003
		US2001005675AA	28.06.2001
		KR20020064955	10.08.2002
		W00149048A1	05.07.2001
		W0200149048A1	05.07.2001